Los Alamos National Laboratory

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TA-53 Procedure

General Emergency Preparedness Procedures

53FMP 109-03.1

Effective date: 1/16/98

APPROVALS

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1.0 Introduction

TA-53 is a large complex facility with multiple tenant organizations. To ensure that emergency response actions are effective and timely, certain emergency procedures must be used facility-wide. This procedure contains general emergency procedures referenced by building emergency plans and makes reference to specific detailed emergency procedures such as those for building evacuations and emergency notification.

The TA-53 Facility Manager has overall responsibility for emergency preparedness at TA-53. Coordination of emergency preparedness functions is normally delegated to the TA-53 ES&H Team Leader.

Paragraph 7.10 of this procedure supersedes memo AOT-DO 94-105, 4/22/95, "Entry Procedure for Restricted Access Areas."

2.0 Purpose

The purpose of this procedure is to establish a framework for TA-53 emergency preparedness activities and provide the general emergency instructions that apply to all TA-53 organizations and buildings.

3.0 Scope

This procedure applies to all TA-53 buildings and all TA-53 residents and visitors.

4.0 Definitions

<u>Building manager</u>. The person who has responsibility for coordinating emergency response activities for a building or collection of buildings. The building manager or TA-53 ES&H Team Leader may designate additional persons to assist with emergency response duties related to a building or building occupants.

Restricted Access Area. An area to which entry is controlled by an active Personnel Safety System or by an administrative lock up procedure due to hazards (primarily ionizing radiation) related to accelerator operation.

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5.0 Responsibilities

Who	Responsibility
TA-53 Employees, Contractors, and Visitors	 Call 911 when an emergency occurs. Call 7-6211 for spill response assistance. Notify TA-53 Facility Management Office (5-2584) of spills. Notify TA-53 Facility Management Office of any activities which could create special emergency response needs. Notify TA-53 Facility Management Office in advance of the presence of hazardous materials which could pose special hazards or regulatory concerns.
Building Manager	 Develop and maintain building emergency plans for assigned buildings. Post 24-hour emergency call-out lists on building entrances. Post hazard warning signs on building or room entrances as necessary.
TA-53 Facility Manager	 Coordinate TA-53 emergency preparedness program (normally delegated to the TA-53 ES&H Team Leader) Provide instructions to emergency response organizations on bypassing the TA-53 gate. Provide emergency responder access to TA-53 buildings by providing all appropriate keys. Specify locations for Sitewide Area Notification System (SWANS) radios and train appropriate personnel on radio use and response to SWANS messages.
TA-53 Spill Coordinators	 Coordinate spill reporting with ESH-18 and the FM/FMD (for occurrence reporting purposes) as applicable. File spill reports with ESH-18 as required.

6.0 Precautions and Limitations

Personnel are not expected to expose themselves to unusual hazards during drills or emergency situations. Follow the instructions of the building manager, senior line manager, emergency response personnel, or the EM&R Incident Commander, as applicable.

7.0 Procedures

7.1 Emergency Access and Access Bypass

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- 7.1.1 The TA-53 Facility Manager (FM) shall provide instructions to Los Alamos Fire Department and EM&R (FSS-20) personnel on bypassing the TA-53 gate in case of a power outage or gate controls failure.
- 7.1.2 Keys for all exterior and most interior doors to TA-53 buildings are kept in a "Knox box" at a designated location. The FM is responsible for providing the appropriate selection of keys for this box and informing EM&R.
- 7.1.3 Emergency access to areas under "HP" (AT-62) key control must be coordinated with the TA-53 RCT office (7-7069).
- 7.1.4 Main entrances to some buildings (e.g., MPF-1, -6, -28, -31) are equipped with badge reader systems that are automatically locked during non-working hours. Every badge reader-controlled entrance has a Laboratory lock core in an adjacent door or in a badge reader bypass switch.
- 7.2 <u>Building Evacuation, Sweep, and Personnel Accounting Procedure.</u> Refer to FMP 109-02, "TA-53 Building Evacuations."
- 7.3 <u>Notification and Reporting</u>. Refer to FMP 109-01, "TA-53 Emergency Notification."
- 7.4 <u>Problems with Loss of Power</u>. Though loss of electrical power at TA-53 does not normally create hazards, following are examples of some situations where power loss could compromise safety:
 - 7.4.1 Crane operations. Power loss to an overhead crane could result in a suspended load. If the outage continues for any time which would result in the load being unattended, the area (see "cone of safety" definition in AR 13-2) must be barricaded and the crane disconnect locked out. Contact the TA-53 FM Office (5-2584) or the facility inspector on duty (104-1154) for assistance.

WARNING: If the load is highly radioactive, a special hazard exists. A recovery plan may be required to mitigate hazards. Contact the FM Office and ESH-1 immediately.

7.4.2 Hood operations. If power is lost to a hood exhaust, hazardous materials in the hood should be returned to a sealed container or otherwise contained. Contact ESH-5 (7-3005) for assistance.

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7.4.3 Confined space entries. If supplemental ventilation, lighting, or other equipment required for a confined space entry loses power, the entrant(s) should exit the confined space until required support equipment can be restored. Contact ESH-5 (7-3005) for assistance.

7.5 Building Reentry and Return to Normal Operations.

- 7.5.1 Only trained emergency responders or persons authorized by the Incident Commander shall enter areas with hazards created by emergency situations (i.e., fire, smoke, fumes, hazardous spills, contamination, etc.). Entries to such areas shall not be made without appropriate personal protective equipment and safety equipment, and shall not be made before hazards are adequately assessed by qualified authority.
- 7.5.2 In the case of drills, the building manager or designee will give the all-clear for reentry to the building. For an actual alarm or emergency, the Incident Commander or Fire Department will give the all-clear notice. DO NOT REENTER THE BUILDING until it is declared safe to do.

7.6 Shelter in Place Procedure

- 7.6.1 In the event of an outdoor airborne hazard, sheltering in place may provide for greater personnel safety than evacuating. The TA-53 FM office will designate shelter locations and will inform employees of them.
- 7.6.2 The TA-53 FM office, in coordination with the Incident Commander, will give instructions for sheltering in place via paging systems, phone contacts, radios, or other means as described in 53 FMP 109-01.
- 7.6.3 General instructions for employees:

NOTE: If it is not possible or safe to reach one of the designated shelter locations, use a conference room, break room, office, or lab in a building where you can turn off the ventilation (such as a transportable).

CAUTION: Do not shelter in Area A counting houses, since they are dependent on the Area A ventilation system which may not be shut down.

- If particulate matter (like smoke) is in the air, place a handkerchief or cloth over your mouth and nose while proceeding to the shelter area.
- Close all windows and doors to the shelter area. Locking may provide a better seal in some cases.

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- Turn off ventilation systems requiring outside air. For the locations listed in Attachment 1, LANSCE-FM will provide instructions to selected offices. In most cases ventilation to the building as a whole will *not* be shut off, so use the designated shelter.
- If you have been outside and radioactive contamination is possible, do not eat or drink until you have been monitored by ESH-1 (7-7069). Contain and segregate potentially contaminated items.
- Move everyone into one room if possible. To prevent infiltration of outside air, door openings can be sealed with tape or wet towels.
- Notify LANSCE-FM (5-2584) or EM&R (7-6211) of your location.
- Keep communication lines open for emergency use. Use a Sitewide Area Notification System (SWANS) radio if available.
- Stay in the shelter location until the Incident Commander or Facility Manager gives notification that it is safe to leave.

7.7 <u>Hazardous Materials</u>

7.7.1 In accordance with the OSHA hazard communication law, each organization at TA-53 is responsible for keeping chemical inventories and MSDSs accessible at work locations and for labeling chemical containers.

NOTE: All experimental activities at TA-53 must undergo safety review, either as user experiments or as addressed by 53FMP 114-01, "ES&H Review of Experimental Activities and Development Tests."

- 7.7.2 TA-53 personnel shall notify the FM office before any chemicals or hazardous materials are brought into the facility which could create special hazards or regulatory concerns not routinely encountered at TA-53 or not covered by existing safety analyses. Examples are large bulk quantities of flammable liquids or gases, explosives, extremely toxic materials, or radioactive isotopes that would cause on-site quantities to exceed DOE STD 1027 Category 3 thresholds.
- 7.7.3 Building-specific hazardous material information is contained in building emergency plans and health hazard assessments (HHAs, maintained by ESH-5). The Automated Chemical Inventory System (ACIS) is an on-line resource for tracking chemicals.
- 7.7.4 Building managers, in coordination with building occupants, are responsible for labeling entrances to buildings or rooms to indicate the presence of materials or special hazards which would be of concern to emergency response personnel.

7.8 Spill and Containment Procedures.

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- 7.8.1 Some large oil vessels and bulk chemical storage areas are described in specific spill implementation plans (in draft as of 12/95). Also, some SOPs contain spill response procedures. In general, the following procedures should be followed if a spill occurs (other than a minor spill which can be cleaned up immediately):
 - Move away (uphill, upwind) if hazardous vapors or liquids are present.
 - Call 911 if an emergency exists.
 - Isolate the area.
 - If spill is flammable, eliminate ignition sources.
 - If it can be done safely, prevent the spill from going down drains or outfalls.
 - Call 7-6211 if spill response assistance is needed.
 - Identify material spilled and hazards (locate MSDS).
 - Report the spill to the TA-53 FM Office (5-2584).
- 7.8.2 If required, a spill coordinator assigned to the TA-53 FM Office shall coordinate spill reporting with ESH-18, and if DOE 5000.3B could apply, with the Facility Manager Designee.

7.9 Confined Spaces

- 7.9.1 Entry to confined spaces shall be made only by trained personnel in accordance with Laboratory confined space procedures.
- 7.9.2 The Laboratory utilizes the capabilities of the Los Alamos Fire Department for confined space rescue. Because the normal LAFD response time to TA-53 is greater than is considered effective for confined space rescue, line management and supervision must take precautions to minimize the probability of confined space accidents to "as low as reasonably achievable." The following precautions should be considered (contact ESH-5 for assistance):
 - use of retrieval equipment (normally required for entries)
 - direct continuous air monitoring
 - fire department standby (if use of retrieval equipment is not feasible)

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7.10 Restricted Access Areas

- 7.10.1 Entry to Restricted Access Areas (RAAs) shall be made only by trained personnel in accordance with applicable SOPs. RAA training is available from the LANSCE Training Office.
- 7.10.2 Entry to RAAs may require approved documentation such as SWPs, RWPs, confined space permits, or lockout/tagout procedures. Specific requirements for each RAA are addressed in the training module for that area.
- 7.10.3 Persons entering RAAs may need to check out PSS/PACS keys from ESH-1. Keys shall be returned to ESH-1 at the end of each shift. If work beyond one shift is required, keys may be signed out at the beginning of the next shift when the work is resumed.
- 7.10.4 Doors to RAAs shall not be propped open unless necessary to ensure safety; doors should be closed and locked behind the entrant. If a door must be left open during work, conspicuous signs prohibiting entry shall be posted. Doors must be closed and locked when the work is finished or if the area is left unattended.
- 7.10.5 Persons entering RAAs should employ the "buddy system" and either work in the company of another person, be in voice contact, or report hourly by phone or intercom.
- 7.10.6 Emergencies and some abnormal conditions may require trained personnel or personal protective equipment for entry or rescue. Obtaining expert opinion (e.g., EM&R, LAFD, ESH-1, ESH-5, CCR staff-member-on-call) is strongly recommended prior to entry under unusual circumstances.
- 7.11 Communications. During an emergency, communications between the Incident Commander, Facility Manager, emergency response personnel, and supporting TA-53 personnel can be maintained by radio and/or mobile and fixed telephones. SWANS radios or other radios on the emergency response frequency may be used for this purpose. SWANS radios may be also be used to communicate important information in the event of a telephone outage at TA-53 or the Laboratory. CCR and ESH-1 maintain several radios on a dedicated frequency that may be used for communication within TA-53.

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8.0 Required Records.

- 8.1 TA-53 spill coordinators shall file spill reports with ESH-18 as required. LANSCE-FM shall maintain TA-53-specific spill implementation plans.
- 8.2 EM&R maintains a master file of building emergency plans. Periodic updates are the responsibility of the building manager.
- **9.0** References (refer to most recent version)
- •LANL Emergency Management Plan
- •LA-12355-M, "Drill and Exercise Manual"
- •53FMP 109-01, "TA-53 Emergency Notification"
- •53FMP 109-02, "TA-53 Building Evacuations"
- •LANL Spill Prevention, Control, and Countermeasure Plan

10.0 Attachments

• Attachment 1: Recommended TA-53 Shelter In Place Locations

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GENERAL EMERGENCY PREPAREDNESS PROCEDURES

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Attachment 1

RECOMMENDED TA-53 SHELTER IN PLACE LOCATIONS:

If it is not possible or safe to reach one of these locations, use a conference room, break room, office, or lab in a building where you can turn off the ventilation (such as a transportable). Shelter in place instructions, including ventilation shutdown instructions, are posted in each of the following locations.

CAUTION: Do not shelter in Area A counting houses, since they are dependent on the Area A ventilation system which may not be shut down.

- •MPF-1--Rosen Auditorium
- •MPF-6--Orange Box Auditorium
- •MPF-31--Pinon and Cactus Conference Rooms
- •MPF-622--MLNSC Auditorium
- •MPF-4--CCR, lobby, downstairs hallway
- •MPF-24--Conference Room
- •MPF-365--Control Room